[Fig.1]

A1: first flange

A2: second flange

A3: second axis

A4: first axis

[Fig.2]

A1: Take out worked work from work station

A2: Input unworked work to work station →→→ start working

A3: Carry out worked work to carry out station

A4: Take out unworked work (of next time) from carry in station

[Fig.3]

11: instruction portion

12: instruction data storing area

13: parameter storing area

14: interpolate operation portion

15: drive portion

[Fig.4]

A1: START of look ahead processing

101: interpret movement instruction and calculate movement time N etc.

103: select flange constituting object of interpolate control

104: control object is first flange?

105: third axis = 3A axis

fourth axis = 4A axis

f1 axis = 3B axis

f2 axis = 4B axis

106: third axis = 3B axis

fourth axis = 4B axis

f1 axis = 3A axis

f2 axis = 4A axis

[Fig.5]

A1: START of current processing

202: update K

204: operate all axes to axis angle corresponding to θ of $\theta = \theta s + K/N\ (\theta e - \theta s)$

205: execute interpolate control at first axis to fourth axis to orthogonal value corresponding to P of $P = Ps + K/N\ (Pe - Ps)$

206: operate f1, f2 axes to axis angle corresponding to θ of $\theta = \theta s + K/N\ (\theta e - \theta s)$

[Fig.6]

A1: MOVJ C000

… PTP control to the attitude

A2: first axis

second axis

A3: first flange side

A4: second flange side

A5: MOVL C001 FRG = 1

… linear interpolate on side of first flange

PTP control on side of second flange

A6: CP control by the axes

A7: first axis

second axis

[Fig.8]

1: carry in station

2: work station

3: carry out station

4: handling robot

5: hand

A1: running axis

[Fig.9]

A1: Take out worked work from work station

A2: Carry out worked work to carry out station

A3: Take out unworked work from carry in station

A4: Input unworked work to work station →→→ start working